131144

JPRS 80489

5 April 1982

Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 210

19981202 109

FBIS FOREIGN BROADCAST INFORMATION SERVICE

5
34
AØ3

PROCUREMENT OF PUBLICATIONS

WORLDWIDE REPORT

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 210

CONTENTS

WORLDWIDE AFFAIRS

ASIA

AFGHANISTAN

EAST EUROPE

CZECHOSLOVAKIA

LATIN AMERICA

BARBADOS

NEAR EAST AND NORTH AFRICA

IRAN

SUB-SAHARAN AFRICA

INTER-AFRICAN AFFAIRS

GHANA

SEYCHELLES

SWAZILAND

ZAMBIA

WEST EUROPE

FRANCE

GREECE

BRIEFS

DPRK, CSSR SIGN RADIO PROTOCOL--Pyongyang, 22 Mar (KCNA)--A protocol on cooperation in radio broadcasting between the DPRK Radio and Television Broadcasting Committee and the Czechoslovak Radio for 1982-1984 was signed in Pyongyang in 21 March. Present at the signing ceremony on·our side were Chairman Yi Yong-ik and Vice-Chairman Yi Pong-hui of the DPRK Radio and Television Broadcasting Committee and other personages concerned and on the opposite side were the members of the delegation of Czechoslovak Radio headed by its Deputy Director General Karel Hrabal and Ambassador Josep Hadravek and an official of the Czechoslovak Embassy in Pyongyang. The protocol was signed by Vice-Chairman Yi Pong-hui and Deputy Director General Karel Hrabal. [Text] [SK220433 Pyongyang KCNA in English 0403 GMT 22 Mar 82]

CSO: 5500/2168

ACHIEVEMENTS IN SPACE COMMUNICATIONS HAILED

Kabul KABUL NEW TIMES in English 3 Mar 82 p 2

[Editorial: "Development of Communication Facilities"]

[Text] As a land locked developing country, expansion and development of communication networks and transportation are among the priorities of the Democratic Republic of Afghanistan for strengthening ties among the people, popularization of scientific thoughts and dissemination of fresh information on science and technology in preparing the broad masses of the people to embrace the contemporary rapid socio-economic transformations in the world.

In an effort to introduce positive fundamental changes, the Government of the Democratic Republic of Afghanistan concurrent with positive fundamental transformations in other sectors pays ample attention to the development of the communications in the country.

The inauguration of the satellites land station 'Shamshad' as a gift of the friendly Soviet Union on the occasion of the 61st anniversary of the frien-dship and cooperation treaty between Afghanistan and the USSR, in fact opens a new era in the communications activities of the country, by which we receive and transmit television programmes by the satellites.

The Shamshad satellites land station not only provides facilities for radio and television programmes in national as well as international level with better quality but also serves as a broad communication network. With the activation of the station, the system of our telephone and telegraphic communications, our television and radio broadcasts will operate better through the satellite system. The station provides facilities in telephone communication from twelve to eighty communication channels with the foreign countries. It also provides desirable possibilities for expansion of telex and telegraphic communications with other countries.

2

Afghanistan after the Saur Revolution, especially its new phase, has changed to an arena of revolutionary work and struggle. We are determined to build a flourishing and blossoming society where all live in full security and prosperity. To realize the lofty aspiration all the potentials in the country should be utilized properly and also utmost use should be made of the experiences and cooperation of our international friends. The expansion of communications network along with other great strides paves the way for realization of such humane aspirations and further familiarise our people with the contemporary science and knowledge, culture and arts and developments of the progressive societies.

The Shamshad satellites land station is a gift of the friendly Soviet Union which has been built with a cost of seven million roubles gratis aid of the Ministry of Communications of the Union of Soviet Socialist Republics and afs six million from the government development budget has been spent for the construction purposes in the project.

The Shamshad satellites land station, another example of the fruitful cooperation between the Democratic Republic of Afghanistan and the great land of the Soviets, will provide Afghanistan with modern communication facilities by the satellite, the fruitful results of which will be evident in the socio-economic changes of the Afghan society in the future.

BRIEFS

TELEPHONE TO SYRIA AUTOMATED--First automatic telephone contact between the CSSR and the Near East, as well as first from the CSSR to a place outside of Europe, was inaugurated on 23 March. The system makes possible telephone contact between the CSSR and 19 telephone circuits in the Syrian Arab Republic. This telephone line, which can be simultaneously used by 11 participants, traverses Hungary, Yugoslavia and Greece, from where it leads via a submarine cable to Damascus, Syria. [Prague MLADA FRONTA in Czech 24 Mar 82 p 7]

CSO: 5500/3009

BRIEFS

NEW RADIO STATION--Bridgetown, Barbados, 22 Mar (CANA)--A new local commer-
cial radio station, Barbados Broadcasting Service (BBS), is expected to go
on the air by September, according to press reports today. The NATION
newspaper today quoted sources close to the private company as saying that
the directors of the radio station had scheduled regular broadcasts to begin
sometime before September. Plans had been made originally to have the station
open for the independence celebrations here on 30 November last year, but
were shelved to allow permanent studios to be completed. The NATION said that
the station is being constructed at a cost of $2 million (1 Bdos dollar;
50 U.S. cents). An agreement for a licence to operate an AM-FM service was
signed last June by minister of information, Nigel Barrow, and the directors
of the company. The station is to have three studios, library and programming
offices, a news room, reception area and a lunch room with a patio as well
as the administrative offices. The report said it has been constructed to
withstand hurricane force winds of more than 160 miles an hour. The BBS
plans to employ about 22 people in the initial stages. It will be located
in St Michaels Parish, about 3 miles southeast of Bridgetown. [Text]
[FL221930 Bridgetown CANA in English 1907 GMT 22 Mar 82]

CSO: 3025/1061

AUTOMATIC TELEPHONE NETWORK INAUGURATED IN MAHALLAT

Tehran KEYHAN in Persian 14 Feb 82 pp 1, 6

[Text] Mahallat--A 2,500-number automatic telephone center for the Mahallat city-region was inaugurated and put into operation in the presence of the Communications Company managing director, the Majles representative from Mahallat, the Mahallat Friday prayer leader, and a group of local officials.

The inauguration ceremonies for the Mahallat telephone center were begun with a reading from the Koran. Then the Mahallat communications official expressed his gratitude to the Mahallat Reconstruction Crusade for their activities in completing the communications building, and proposed that the center be named for martyr Qandi in recognition of his services. After that the Communications Company managing director spoke, praising the efforts of martyr Qandi, and stated: At the present time we do not have any foreign experts in this company, and all technical and expert activities are done under the supervision of Iranian brothers.

At ceremony's end, the Mahallat telephone center was put into operation by the city's Friday prayer leader, and those present inspected various parts of the center. Afterwards they proceeded to the perpetual place of rendezvous of those who love God, in order to participate in Friday prayers.

Rasht--Automatic telephone center No 4 for the Rasht city-region, with a 5,000-number capacity, was inaugurated and began operations simultaneously with the holding of revolution ceremonies in Gilan Province. Those present included Hojjatoleslam Ehsanbakhsh, representative of the imam in Gilan Province, Shadnush, chief of the Gilan Governor General's office, the Gilan municipal police chief, the gendarmarie commander for the Gilan district, and a group of other officials. In these ceremonies, the Gilan Province communications managing director spoke about the Ten Days of Dawn and the precious achievements of the Iranian Islamic revolution, and also about the technical specifications and operation of this communications center. Then the imam's representative in Gilan Province inaugurated Rasht's No 4 automatic telephone center in the name of God. Afterwards various parts of the center were inspected by the imam's representative and chief of the Gilan Governor General's Office and their companions.

According to the report of the CENTRAL NEWS UNIT correspondent, the sum of 250 million rials was expended in preparing technical operations and installing

Rasht's automatic telephone center No 4. All of this was accomplished through the efforts of Iranian engineers, technicians and workers.

A 1,000-number telephone center in Firuz Kuh was officially inaugurated and put into operation in the presence of Tehran's Governor General, the Majles representative from Firuz Kuh and Mamuniyeh, and the Communications Company managing director. The distribution of telephone lines in Firuz Kuh has begun, and inter-city telephone service also will soon go into operation.

Orumiyeh—On the occasion of the Iranian Islamic revolution's third anniversary, a new Naqadeh Post Office building, and a Post and Communications Office for the Orumiyeh Sugar Factory Village were inaugurated.

The new Naqadeh Post Office building, with 650 square meters of floor space, was built through the expenditure of 20 million rials allocated from special district plans credit. The Orumiyeh Sugar Factory Village Post and Communications office, with 180 square meters of floor space, was built with a 5 million rial expenditure.

During opening ceremonies for the Orumiyeh Sugar Factory Village Post and Communications Office, in which provincial authorities and village people participated, a speech was made about the goals of the Iranian Islamic revolution. Following that, opening ceremony participants viewed a stamp exhibition set up in Sugar Factory Village to commemorate the Ten Days of Dawn.

On the basis of a report, a 1,000-number automatic telephone center for the city was inaugurated and put into operation simultaneously with the glorious ceremonies on the anniversary of the revolution's victory held in the Naqadeh city-region. Construction of an automatic telephone center was a long-held hope of the city-region's people which was realized through the efforts of the Communications Company's technical employees after the victory of the Islamic revolution. At the same time Naqadeh was tied into the national network with a code of 0444.

Bakhtaran—In anticipation of the fourth anniversary of the glorious Islamic revolution's victory, a post office has been set up on the Sumar and Sar-e Pol-e Zahab fronts.

According to the report received, a post office in the Abadar Base and a forwarding post office in Sar-e Pol-e Zahab have been set up in order to speed postal communications between the fighting brothers and their families.

Furthermore, six mailboxes have been set up on the front lines of the Sar-e Pol-e Zahab and Gilan-e Gharb fronts.

The same report indicates that a rural post office for Dowlat Abad and Ravansar was opened to commemorate the Ten Days of Dawn.

Tuysarkan—In a ceremony on the anniversary of the history-making bright dawn of 22 Bahman, a 1,500-number automatic telephone center for the Tuysarkan city-region was inaugurated and put into operation. Similarly, 100-number telephone centers

were inaugurated in the villages of Shahanjerin and Qaraveh which are situated in the Zaran district.

Khorramabad--The Khorramabad and Borujerd city-regions were connected to the international telephone network on the occasion of the Ten Days of Dawn and the third anniversary of the Islamic revolution's victory. During the ceremony, operation of the second international telephone began in the Khorramabad and Borujerd city-regions. Through the plan's operation, inhabitants of the two city-regions can make direct telephone contact with other countries. As operation of the international communications plan for the two city-regions began, the managing director of Lorestan Province's communications was interviewed by the Khorramabad CENTRAL NEWS UNIT and stated: Other than the plan which went into operation today, more than 80 percent of the construction operations for automatic telephones in the 'Aligudarz city-region and surrounding districts in Lorestan Province have been accomplished through the efforts of committed Iranian experts. We will soon witness the operation of this communications plan.

Shahr-e Kord--On the threshold of the anniversary of the Islamic revolution's victory, a 500-number semi-automatic telephone center began operation in Farrokh Shahr, in the presence of Hojjatoleslam 'Isa Tavassoli, Farrokh Shahr's Friday prayer leader, the administrative political deputy from the Chahar Mahall and Bakhtiari Governor General's Office, a group of martyrs' families, and people from Farrokh Shahr. The ceremony began with a reading from the Koran. The managing director of Chahar Mahall and Bakhtiari Province communications spoke about how the center was established. Then Hojjatoleslam Tavassoli gave a short speech about the positive accomplishments of the Islamic revolution, and said: One of the blessings of the blood of martyrs is that the shining faces of the Hezbollah [Party of God] appear in their full beauty. Anything done anywhere in the world to benefit the oppressed is a thorn in the eye of Islam's enemies. Then the administrative political deputy from the Governor General's Office, emphasizing the slogan of "independence, freedom and the Islamic Republic," said: All of us must mobilize in order to achieve self-sufficiency and independence. It is through greater effort that we will be able to respond affirmatively to the aims of the Islamic revolution and the imam's commands.

9597
CSO: 5500/5328

'PANA' DIRECTOR INTERVIEWED

AB221553 Lagos NAN in English 1520 GMT 22 Mar 82

[By Rowland Nwachukwu]

[Text] Dakar, 22 Mar (NAN)--The director of the PAN-AFRICAN NEWS AGENCY
(PANA), Mr Cheika Ousmane Diallo, has said that the take-off of the organiza-
tion was being hampered by a shortage of qualified manpower.

Speaking in an interview with the NEWS AGENCY OF NIGERIA (NAN) on Friday in
Dakar, Senegal, Mr Diallo said that the manpower problem was the most important
because we want the most qualified and competent Africans to come and work for
PANA.

Mr Diallo said that it was difficult to find highly qualified people who can
be released by their countries or who can accept the remuneration offered by
the organization.

Besides that, he went on, we have to find people who have Pan-Africanist ideas,
because working for PANA was different from working for ones own country.

Asked what criteria the agency would adopt in recruiting staff, the PANA di-
rector said that the first was efficiency, followed by geographical distribu-
tion and linguistic considerations.

He added: But the most important criterion is efficiency because at the end,
what people will use is the material of PANA. They will not ask for the na-
tionality of the man sending the story.

What is important to us is the result, and to give out a product which is of
high quality, and which can really compete with the big foreign news agencies.

On the technical problems of PANA, Mr Diallo said that it had within the past
three years set up part of the telecommunications network.

He added, however, that between now and the end of the year, the agency would
hold meetings at regional pool levels to co-ordinate its telecommunications
projects.

The projects involve linking member-countries of PANA with the headquarters of the regional pools and linking the pools with the PANA headquarters in Dakar.

Mr Diallo explained that there were three possibilities for linking the regional pool headquarters with the agency's headquarters; either through the satellite or the submarine cable or through the high frequency radio microwave.

He said that the West African regional pool, with its headquarters in Lagos, would link with Dakar by submarine cable.

The PANA director said that another technical problem was that of equipment. He said that the organization would soon decide on the type of equipment it needed at the Dakar headquarters and at the headquarters of the regional pools.

Besides that, we have got to see the countries which don't have communications facilities, so that we can provide them with the minimum equipment necessary for them to participate in the activities of PANA, he added.

On whether it was necessary to link all the regional pool headquarters or all the member-countries before the take-off stage, Mr Diallo said that PANA would start with the equipment of those who could participate, adding: After that, when the others are ready, they can also follow.

CSO: 5500/5732

ADB LOAN TO PTT FOR EXTENDING TELEPHONE LINKS

Accra DAILY GRAPHIC in English 26 Feb 82 p 8

[Article by Wendy Asiama]

[Text] THE African Development Bank (ADB) based in Abidjan, Ivory Coast, has granted the Posts and Telecommunications Corporation (P.&T.) a loan of $6 million under the Pan-African Telecommunications Network (PANAFTEL) to provide telephone links between Ghana, Ivory Coast and Togo.

Ghana's portion of the project extends from the border of the Republic of the Ivory Coast to that of Togo which covers approximately 500 kilometres.

Mr B. G. Hadjah, Senior Public Relations Officer of the P & T. Corporation told me in an interview that the total amount for the whole project would come up to some $9.32 million and that the difference of more than $3 million would have to be paid by the P & T.

Mr Hadjah said since the corporation was not in a position to provide the funds it was negotiating with the ADB for a further loan to cover the amount.

When completed, the project will also provide the whole southern Ghana with modern telecommunication facilities. The immediate benefit will be the linking of townships like Ada, Axim and Keta to the national subscriber trunk dialing system through a new automatic telephone exchange to be provided as part of the project.

Mr Hadjah said as part of the project, the corporation was engaged in building repeater stations at Sege and Akatsi in the Volta Region and Nawuli, Aweiabo and Amuaba in the Western Region

CSO: 5500/5728

BRIEFS

BROADCASTING HOURS EXTENDED--Ghana Broadcasting Corporation has decided to extend its transmission hours on GBC--1 and 2 from 5 a. m. to 9.05 a. m. instead of the existing 5.30 a. m.--8.05 a. m. with effect from Sunday, to project the aims and objectives of the revolution. A release issued by the GBC in Accra yesterday said to this end, new programme ideas had been injected into the content of broadcasts on the two stations. [Text] [Accra GHANAIAN TIMES in English 26 Feb 82 p 8]

CSO: 5500/5728

OUTER ISLAND COMMUNICATIONS COULD BE MORE SECURE UNDER NEW BILL

Victoria NATION in English 10 Mar 82 pp 1, 2

[Text]   STAND-BY radios should be set up on outer islands in case main sets break down, a new bill of law published this week proposes.

Under a 1978 decree, radio sets for communication with Mahé have to be set up on inhabited islands.

If the Radio Communications (Islands) (Amendment) Bill which came out on Monday is accepted by the People's Assembly at its next sitting, 18 islands and island groups will have to also set up standby radio receiver/transmitters to back up the sets they already have.

. The islands concerned are both privately and state owned and include all possessions of the Islands Development Company.

. The island groups concerned are Aldabra, Cosmoledo, Poivre, Farquhar and Providence Atolls.

In the Amirantes group d'Arros, Desroches and Marie Louise are included.

Other islands are Alphonse, Astove, Assomption, Coëtivy, Frégate, Ile aux Vaches, Ile Denis, Ile Plate and, off Mahé, Silhouette and Ile du Nord.

Any owner who does not install two radio sets and who even fails to maintain or operate them could be fined by a court up to R10,000 and/or be jailed for up to a year.

The setting up of a reliable radio communications network between Mahé and the other islands is seen by the Government to be indispensable to the proper development of the islands and to the security of the country and of the exclusive economic zone.

With airstrips on most of the main islands and fast patrol boats available, the radios are especially valuable in medical and other emergencies.

CSO: 5500/5731

MERGER OF SBS-STBC ADVOCATED

Mbabane THE SWAZI OBSERVER in English 6 Mar 82 p 4

[Editorial: "Put SBS-STBC Under One Roof"]

[Text]

WE have learnt with interest that the Government is to buy Swaziland Television Broadcasting Corporation to the tune of more than E2 million. That is good news ensuring the continuation of the service in a sometimes entertainment starved local population.

It is disturbing, however, to note that the company which established the station has run into financial difficulties within less than five years after it was established. We hope there will be an overhaul of the management to avoid the financial problems that have beset the corporation since it started.

On the other hand, we note that this step has been taken without any signs that the Government will try to improve the situation at the Swaziland Broadcasting Service. SBS, operating since 1966, has been suffering from chronic staff and transport shortages up to now. This has resulted in many public complaints about poor programmes from an overworked staff.

We welcome the boosting of the station's FM reception last year to cover the whole country. We wish the Government had also tried to improve news coverage locally. The Third National Development Plan calls for regional reporters in all districts, but so far this hasn't been done.

The local people own more radio sets than television ones. However, be that as it may, we hope buying the station will mean a step towards an attempt to have more locally produced films. This will of course mean injecting even more money into the station's operations.

The programme content, as it is, has almost no bearing on Swazi life. For example, how many locals are interested in dog training programmes?

We also wonder how STBC staff salaries will be affected, now that it will be parastatal. It is common knowledge that STBC staff are getting much higher salaries than SBS. These two electronics media go almost hand in hand, why can't they be under one roof. In most countries this is the case.

This would decrease workloads on news staff who could write for both media. It would also strengthen their advertising teams.

Running STBC and SBS separately would mean two salaries for two directors. This would also apply to deputy directors. If they were under one body the Government might consider paying the salary of one director.

CSO: 5500/5731

BRIEFS

SWEDISH, CHINESE TRANSMITTER SPARES--Ministry of Information and Broadcasting
is expecting a consignment of spares for Radio Zambia's Twin Palm transmit-
ters from Sweden and Chinese spares for the Short Horn transmitters are in.
Zana [Text] [Lusaka TIMES OF ZAMBIA in English 8 Mar 82 p 1]

CSO: 5500/5730

CNET STUDYING PROJECT TO INTEGRATE PHONE, TELEX, TRANSPAC

Paris REVUE FRANCAISE DES TELECOMMUNICATIONS in French Oct 81 pp 59-60

[Article: "Integration of Telecommunications Services in a Digital Network"]

[Text] The telecommunications services currently available to users require operation of several specialized networks, such as a telephone one, a telex one, Transpac, Telecom 1,... Their characteristics differ widely and the subscriber is given a type of interface depending upon his needs. While certain services can be offered as options by a given network, other services can be accessed only by way of different networks.

Subscriber needs are tending more and more toward diversification, and their demands toward better quality and total accessibility. These legitimate demands entail problems of cost, operation and maintenance that are growing in complexity. This is what has led the CNET-Lannion A [National Center for Telecommunications Studies at Lannion A] to draw up a transitional strategy toward the future ISDN [Integrated Services Digital Network].

Planning for the Future

The plan drawn up by the CNET-Lannion A was based on the findings of advance-planning studies contained for the most part in the work titled "Telecommunications - Objective 2000" (see REVUE FRANCAISE DES TELECOMMUNICATIONS No 34, Jan 1980). This plan has now been concretized in the form of equipment specifications for that network proposed in the CERISE [Services Integration Interface Center] report, which presents a complete study of an RITD [Integrated Telephony and Data Network] and defines the elements of the Interface Center.

From the user's viewpoint, the integration of services is characterized by a standardized interfacing facility, a uniform procedure for dialoguing with the network, and oneness of interlocutor up to a point, from the standpoint of such as sales, maintenance, billing, etc.

Total standardization of the interface facility is predicated upon availability of a wideband facility, particularly for graphics services. This choice, however, brings to an issue the present distribution network, its copper pairs having in such case to be replaced by optical fibers.
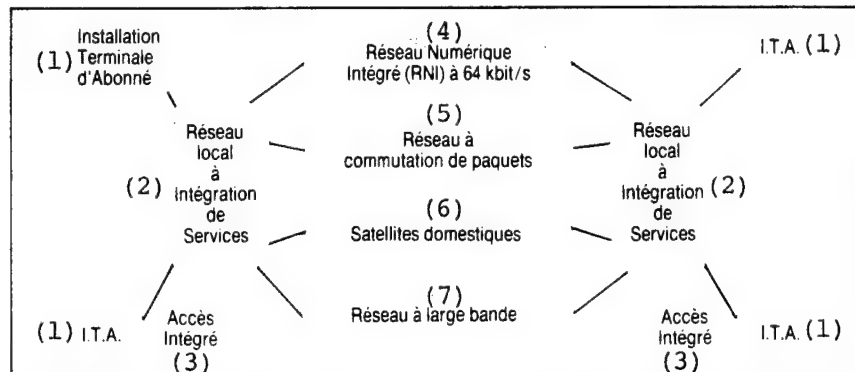
Target ISDN defined in CNET study of an
integrated voice and data network.

Key:

1. Subscriber terminal installation [ITA].

2. Integrated-services local network.

3. Integrated access.

4. RNI [Integrated Digital Network] - 64 Kbits/sec.

5. Packet-switching network.

6. Domestic satellites.

7. Wideband network.

The RITD study opts for a second alternative, a more realistic one considering the magnitude of investments involved: Keeping the distribution network as is and digitizing the subscriber line to permit simultaneous transmission of voice, data and address-information signals.

The approach taken by the CERISE report, besides advocating a more ambitious network development policy than any known foreign ones, is innovational in more ways than one.

The strategy advocated, after examination of all possible solutions, is designed to satisfy the immediate demand at the same time that the network is being constantly adapted to real demand. Thus, to avoid a classification of services such as would run into a congested network, the services have been defined in such a way as to bring together all imaginable functions. For example, a telephone service connection is established at the request of one or the other of the two interlocutors, but could just as well be established between them at the request of a third.

This strategy is based upon analysis of demand (in terms of services as subscribed for by the customer). Thus defined, the services do not fall into totally independent categories one from the other, but are composite services that can even cross over into the basic services. The concept of class of services emerges directly linked to that of grade of service: The subscriber can order from the network a grade that meets his actual needs.

The concept of grade of service becomes fundamental. Parameters have therefore been defined to enable the grade to be specified: Measurement of the extent to which service is required by the subscriber, and methods enabling overall specification of service, taking into account their interaction.

This strategy is moreover a "gentle" strategy of introduction, based on a finely detailed knowledge of the existing network. Other studies, also carried out at Lannion A, addressed particularly the characterization of the local network; the CERISE plan embodies the results of these studies. Thus, a graduated strategy of implementation in four stages tied to investment decisions is advocated.

1985-1990: Oneness of access line (digitization of the existing local network through a strategy of superposition).

1990-2010: Oneness of access and grade of service procedures (creation of a superimposed RITD).

Beyond 2010: Conversion of the RITD into an ISDN, replacing metallic facilities with optical fiber facilities (see schematic).

PALME, An Experimental System

Based on the primary considerations in this report, the CNET-Lannion A has begun the study of an experimental automatic switcher embodying the principle of mixed circuit- and packet-switching.

PROJET PALME (1)

UNE APPROCHE DE L'INTEGRATION TELEPHONE-DONNEES DANS LE RESEAU LOCAL (2)

(3)
**UNE INSTALLATION
D'ABONNE REGROUPANT
DES TERMINAUX VARIES**

**UN RESEAU DE
DISTRIBUTION NUMERIQUE
(4)**

(5)
**UN SYSTEME
DE COMMUTATION INTEGRE
(TELEPHONE-TELEX-DONNEES)**
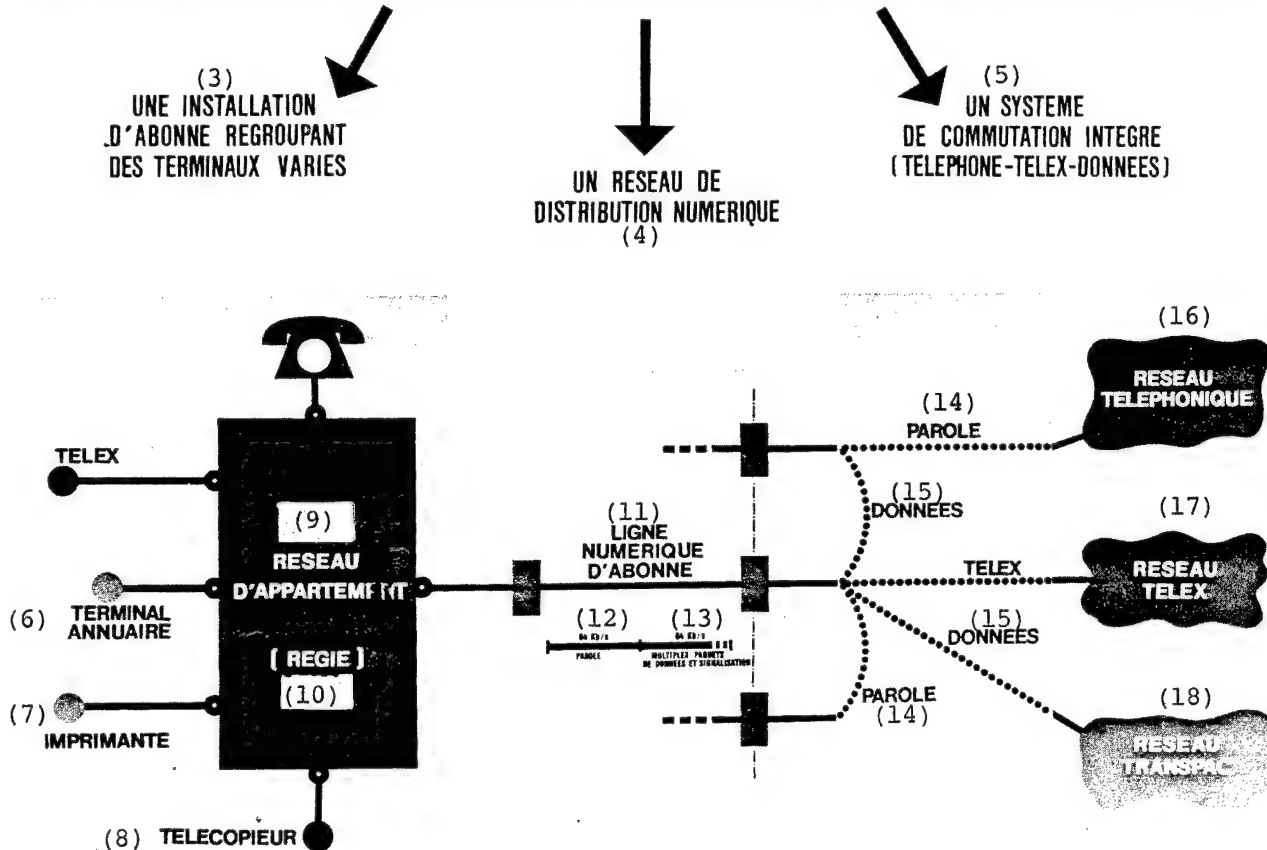
Key: 1. PALME Plan.

2. An approach to telephone and data integration in the local network.

3. Subscriber installation grouping various terminals.

4. Digital distribution network.

5. Integrated switching system (voice and data).

6. Directory terminal.

7. Printer.

8. Facsimile terminal.

9. Subscriber premises network.

10. Service bay.

11. Subscriber's digital line.

12. 64 Kbits/sec – voice.

13. Multiplexed data and address information packets.

14. Voice.

15. Data.

16. Telephone network.

17. Telex network.

18. Transpac network.

PALME [Multiservices Local Automatic Switching Plan], interfacing with the three principal French telecommunications networks (telephone, telex and Transpac) will make available the four basic services: telephony, telex, data transmission and facsimile.

The subscriber will have peripheral equipment to enable him to access the different services (telephone handset, data terminal, facsimile terminal) all connected to a service bay, which in turn is interconnected with the switching center by means of a digital line.

The principal "technical" options provided by the PALME system are:

--Packetized transmission of data and address signaling exchanged between system command and periphery: subscriber service bays and telephone-, telex-, and Transpac-interface subsets;

--Exclusive use of Protocol X25 to set up communications channels for the routing of packetized data and address-information;

--Hybridized switching of circuits at 64 Kbits/sec for voice and of packets for data and address information;

--Grafting of packet-switching, call processing, operations and maintenance functions on to a common-storage multimicroprocessor system.

The PALME system, designed during the fall of 1979, is now at the stage of actualization: The project is now undergoing the writing of detailed system specifications, internal and external.

It has already enabled verification of certain projective assertions contained in the CERISE report, and has specifically pointed up certain technical and economic implications of the alternative chosen in that report. In particular, it is proving necessary to define a gamut of subscriber service bays, based on subscriber traffic demands and on certain aspects of grade of service, that can satisfy all users. Studies on these aspects are currently being carried out at the Center.

CNET Offers Its Know-How

The CNET is now in a position to offer interested industrialists the CERISE report (around 450 typewritten pages) supplemented by meetings for technical discussions, under terms to be negotiated with each participant. Several industrialists already have a copy of this report under a know-how transfer contract.

PALME could also be of interest to industrialists, in that, the questions resolved at the CNET provide useful information for other projects. The CNET holds two patents in particular on which it is prepared to grant licenses:

--"A time-division digital switching system for MIC [Microwave Integrated Circuit] channels handling packetized voice and data," filed 13 February 1980, No 80.03.181 (CNET/2167).

--"A time-division digital circuit- and packet-switching of channels," filed 23 January 1980, No 81.01.327 (CNET/2186).

The CNET-Lannion A is recommending this dialogue with industrialists, the more so since numerous extensions of CERISE and PALME are as of now either already under way or being planned. Moreover, the P & T Administration's very active participation in the international telecommunications standardization bodies CCITT-CEPT) embodies a number of considerations, of which this RITD study is a major element.

For further information on the integration of telecommunications services in a digital network, contact should be made with:

> "Brevets et valorisations des inventions"
> CNET
> 38-40, rue du General Leclerc
> 92131 Issy-les-Moulineaux

9399
CSO: 5500/2107

NEW TELECOMMUNICATIONS DIRECTOR SPEAKS ON PLANS, EXPORTS

Paris ZERO UN INFORMATIQUE in French Dec 81 pp 38-43

[Interview with Jacques Dondoux, new general director of telecommunications, by Jean-Marc Chabanas and Luc Fayard]

[Text] ZERO UN INFORMATIQUE (monthly) met with Jacques Dondoux, the new general director of telecommunications, the man who will bring in telematics... Here, he responds to the big questions of the day--ranging from professional videotex through exports and data microprocessing to local networks--that are of concern to all professionals and users of data processing.

[Question] By 1985, 500,000 professional-use videotex terminals... What exactly do you mean by "professional use"?

[Answer] Let me first state that the minister of PTT, Mr Louis Mexandeau, is seeking to develop on a priority basis not only professional use of videotex but also its collective use. Let us dwell a moment on this latter point.

There is collective use when the equipment is installed in a public place, whether that be a post office, a tourist agency, a railroad station, a city hall, a bank, in sum, any premises serving the public. Its use may be either by way of an attendant or of the self-service type. Our interest in promoting collective use is to popularize videotex usage in its professional and domestic applications. In coming months, it will be the object of a vigorous promotion effort by the PTT.

To return to your question, there is, in my view, professional use of videotex simply whenever it is used within the terms of reference of one's occupation. For example, to consult a data bank. This could be in the case of doctors, lawyers, architects, but also the personnel of industrial or commercial enterprises. All our market surveys indicate there is a substantial demand for it.

[Question] And the farmers?

[Answer] Videotex, like the telephone, should help to dispel the geographic isolation of the rural sectors. In keeping abreast of commodity prices throughout the country, etc.

That having been said, the PTT is not planning to develop professional videotex systems of its own. We are offering our participation but we do not want to get involved directly in the furnishing of data for general use.

[Question] The PTT is nevertheless deeply involved in the Teletel experiment at Velizy.

[Answer] At Velizy, we are limiting ourselves to a demonstration of feasibility. Of course, everyone is asking: "What will Velizy be?". The CITV [Teletel Data processing Center at Velizy] will be only what the participants want it to be. If the organizations providing services see a real developmental potential, a niche they can fill in the data-processing market, they will submit their projects. To the extent these projects involve use of the telecommunications network, we are prepared to participate.

The only thing we ask in operations of this type is that the lines of separation between functions remain clearly drawn. Videotex must not be the vehicle for some to suddenly transform themselves into journalists. If doctors, for example, want to organize to receive medical information electronically,that is fine! But the type of information that is currently the province of the professional press or of the general public must remain their respective provinces, even though the transmission facilities be changed. The same safeguards, the same rights and the same responsibilities must exist in the electronic press, should it be developed, as now exist in the printed press. Telematics is not the Far West! There can be no question of obtaining, at whatever price or by whatever means, a concession in a new field that would be opening up to us.

[Question] Let us return to that figure of 500,000 terminals. Are you not apprehensive of the difficulties involved in putting in place a network organization capable of administering a volume of that magnitude?

[Answer] There are today more than 17 million telephone subscribers. Certainly, administering a mere 500,000 more pieces of equipment... Besides, though the line is provided by our monopoly, the videotex terminals will be furnished either by the PTT or by private industry. The user will therefore have, at the low end of the range, a choice of at least two suppliers. If he uses our equipment, we will maintain it. On the other hand, as regards data-services transmission centers, the PTT considering that this field is the province of professional organizations, we will operate only transmission centers furnishing information on strictly PTT-connected activities, such as information on telephone service, postal service, etc.

[Question] Do you have an approximate idea as to the additional load these 500,000 terminals will place on the telephone lines?

[Answer] That presents a problem for us. Will videotex service generate traffic of sufficient volume to justify the lease of an additional telephone line by the user? Only experience will provide the answer. But it must remain clear that the essential thing for the moment is to provide everyone with telephone service, not videotex. The DGT [General Directorate of Telecommunications]is ordering

300,000 videotex terminals this year and, at the same time, 2,300,000 telephone lines. A comparison of these two figures is sufficient to realize the relative importance of the demand needing to be satisfied.

The first videotex terminals in significant quantity will be delivered around mid-1982 and will all be installed by 1983 at the latest. In 1982, we will place a new order for terminals, some of which will be of a higher order of performance. They will be in operation by the beginning of 1984. From 1983 on, our orders will depend upon the demands of the market as regards volume. By then, the terminals ordered will perhaps be of modified types to respond more effectively to the needs of users. On the other hand, it should be understood that the DGT will offer only simple terminals. We feel in fact that the supplying of top-of-the-line videotex terminals does not need our direct support. The need for complex equipment can best be satisfied by private enterprise.

[Question] In this regard, what is your policy with respect to approval of videotex equipment?

[Answer] Equipment must meet the Teletel Franco-European standards. That is the sole constraint. If a piece of equipment of European manufacture and meeting this standard is submitted for approval, I know of no reason why approval should be refused. From a European standpoint, there are agreements, particularly under the Rome Treaty. We respect these agreements, expecting full reciprocity. The problem may be different in the case of equipment coming from countries other than those of the Common Market. For the moment, the situation is wide open. But by 1982-1983, should the problem arise, the government will certainly have provided us with instructions.

[Question] You frequently make reference to the economic rules of the marketplace. When the nationalizations affecting particularly data processing and telecommunications take effect, will we still be in the presence of a marketplace economy?

[Answer] When the state nationalizes a firm, there is a change in the capital ownership and in the ultimate aims of the activities of the enterprise, but that does not change the economic rules to be respected or the rules of competition. A nationalized company, generally speaking, continues to confront other enterprises. The fact that Renault is the property of the state does not mean that it need no longer face stiff national or international competition.

[Question] But is not the telematics market more artificial than the automobile market, it having, in the final analysis, been created and nurtured by the state?

[Answer] It is, above all, new. Where innovation is radical, the market is always difficult to get a pincers on. Remember television. What could be said about it in 1930? Did not RCA take a gamble at that time? As it has recently with the video disk... The more radical is innovation, the more uncertain is success and the less assured it is. This is not a reason to halt technical developments, where these are under the control of the users. In the case of videotex, PTT is proceeding no differently: Like other innovators, it will submit to the choice of users, in a framework that includes several media.

[Question] These new state-of-the-art services that you cite are dependent upon data processing facilities; for example, upon CII-HB computers in the case of Teletel. When demand has increased to the point that you will need very powerful computers that are not available from French manufacturers, where will you go?

[Answer] I repeat, there will be no PTT data-service centers except those strictly related to PTT"s specific functions, such as telephone and postal service information centers. Those operating other centers must decide their policies governing choice of equipment. For our applications, I favor a distribution of data-processing functions. We are presently giving thought to the configuration of our this time. A regionalized solution would respond very well to the government's intended policy. In sum, being as we are transmitters of information by nature, the putting in place of a distributed architecture, with regional centers operating local data bases interconnected among themselves by the PTT network, should present no great problem for us. Certain configurations will of course lend themselves to this type of structure and in such cases we will have to plan on large computers. But it will certainly not be the rule.

[Question] And what are you planning to do in the domain of local networks, which are developing principally under the American banner of the de facto standard set by Ethernet, a standard to which Thomson, in particular, has announced its adherence?

[Answer] Allow me to cite an anecdote. Many trains in France circulate on the left. Do you know why? Simply because our first railway line, which during the 19th century linked Firminy to Rive-de-Gier, was ordered--locomotive and chauffeur included--from the Scots. And that is how the standard for the circulation of trains was created. If our country has fallen behind in a given domain, the wisest solution is to adopt the standard of the most advanced country in that domain. If, on the other hand, national capabilities and developmental efforts are being deployed, there is no reason not to be the originator of standards. I point out in this regard that the Parisian metro travels on the right. The key to being able to choose one's own standard is not to fall behind technologically. To return to the question of local networks, was not the PABX [Private Automatic Branch Exchange] the original real-time switcher? The use of real-time switching in fact constitutes a formidable rival to the looped-line networks you cited above. And, thanks to Louis Joseh Libois, we do not rank last in the domain of real-time switching.

[Question] Let us talk about a market that definitely exists: That of personal information-processing. The some 60,000 users of personal computers and the million owners of pocket calculators in France would like to be able to communicate with each other. Can they not look forward to type-approval of a simple and cheap modem?

[Answer] It would indeed be desirable to study that problem. Since the characteristics of French telephone lines conform to international recommendations, our industrialists should be able to develop exportable modems. And we are prepared to support their developmental efforts.

[Question] Is it possible to look forward to a videotex interface for personal computers?

[Answer] Of course! In fact, they already exist. As soon as videotex equipment is being mass produced, certain subassemblies can be used by the manufacturers of personal computers and it is possible to look forward to future equipment that combines the advantages of both.

[Question] Let us talk now about PTT's policy in regard to exports. Instead of concertion on the European market, as is being advocated by many industrialists, the previous administration appears to have opted for the high road namely, the American market. What is your strategy in this domain?

[Answer] If you analyze what has occurred these past years in telecommunications equipment export sector, you will see that the previous administration did not shine in this sector. The most striking French successes of the last decade came about based on work done between 1965 and 1975 on electronic switching and micro-wave systems. We exported the E10 system, for example, to 40 countries. To be able to export, we must be able to offer either very cheap products or technologically advanced ones. France will always have a difficult problem to deal with as regards prices, unless we want to see wages drop too low. Let us compete then on technology! We are competitive in the domain of bottom-of-the-line videotex; we must take advantage of this industrially. Our technological lead in this respect favors our penetration of the markets of industrialized countries as much as it does our penetration of developing-country markets. If France proves its competitiveness on the American market, it will then be able to export comfortably to these other countries.

[Question] Is the conquest of the West to continue, then?

[Answer] Definitely. But we must eschew verbal excesses, indeed election-type rhetoric, and not trumpet deals about to be concluded, only to have them suddenly fall through. We are continuing our efforts directed toward the American market, perhaps with more moderate phraseology, but with the same tenacity. In this regard, I am convinced that the state takeover of firms will in no way affect their relations with their American partners. It is not on the basis of who owns the capital that a consumer chooses between buying a Renault or an Alfa-Romeo.

[Question] Is this American market open because there is no American videotex standard?

[Answer] The Americans are not in an industrial wasteland, and you can be sure of that!. They have videotex systems, but no one in particular has taken over the market. The fact is that Great Britain was the first to go into the indus-trialization of videotex, choosing, however, a standard that is today posing problems to its promoters. The agreement signed from the European standpoint merging French and British standards has resulted in an advanced standard which is moreover now a European standard. The Americans have decided not to choose a standard. They feel a standard will ensue from the product that finally domin-ates the market. This is typically the American way.

[Question] Is there a slight chance, therefore, for the French standard?

[Answer] If several standards can coexist, France has a very good chance. If standardization, however, leads to the establishment of one standard only, it will obviously be that of Western Electric, an AT & T subsidiary, and in this case, owing to the importance of the American market, that standard could take over entirely. It is not at all certain, however, that there will be only one standard in the United States.

9399
CSO: 5500/2108

ELECTRONIC 'UMBRELLA' PROTECTION AGAINST PIRATE STATIONS

Athens TO VIMA in Greek 25 Feb 82 p 8

[Text] An electronic "umbrella" to protect the entire Attiki basin from radio and television pirates is going to be installed in March. According to verified information from the Ministry of Communications, this electronic umbrella will include a powerful relay station which will be installed on Mount Parnis and will coordinate the direction finders in locating the radio pirates.

In the meantime, after about a year's silence, the pirate of the television channels has appeared again, but this time he is far more cautious. He did not show films, but color photographs of American cigarettes and, for a few minutes, he transmitted music of Kazandzidis. The television pirate's unexpected reappearance occurred on 24 February at 0300. It should be noted that, for a week now, music with a lot of static has been heard coming from television two hours after programs have ended; no qualified person in the Ministry of Communications knows exactly what is happening. At any rate, the picture of the pack of cigarettes, which was projected for three minutes on 24 February, was in color, but with a lot of "snow."

Several months ago, when the television pirate was appearing nearly every day on television, showing movies (with Greek subtitles), and sometimes porno films, the former government decided to extend operation of the television relay stations to prevent the television pirate from penetrating the channels. The relay stations continue to be activated today, for about two hours after the end of programming, despite their high-energy operation. It seems that this time the television pirate-ghost found a way to circumvent this impediment. But with the new electronic machines (made in Japan) which the Ministry of Communications has already procured, locating the pirates will now be very easy.

The agency responsible for installing the electronic umbrella is OTE [Greek Telecommunications Organization], which is cooperating closely with the Ministry of Communication's directorate for "illegal radio stations" on matters related to locating the radio pirates.

As became known, the new machines procured by this directorate will make it possible to locate any illegal radio or television broadcast occurring in the Attiki basin, whether transmitted on medium waves or FM. Up to now,

the authorities were able to locate broadcasts transmitted only on medium waves, since the direction finders they used were obsolete.

All the ministry's mobile crews will use these modern direction finders and will be connected to the special relay station which will be installed on Mount Parnis. This relay station will be the "electronic eye" for those pursuing the radio pirates. It will also be automatically connected with the Gendarmerie Headquarters so that police authorites in the area where illegal programs are being broadcast can be notified and can intervene in time. The coordinating center for movement of crews with direction finders will be located on Syngrou Avenue, in the mansion which houses the Ministry of Communications. As was made known, an allocation of 15 million drachmas was made available for purchasing these machines.

9247
CSO: 5500/5334   END